

ABSTRACT OF THE DISCLOSURE

A fingerprint authentication apparatus has a combined visible/infrared light source, which illuminates a finger placed on an optical image sensor with both
5 infrared light and visible light. The optical image sensor has a block with infrared sensitivity and a block within infrared sensitivity, and generates a fingerprint image from light scattered by the finger. The infrared sensitivity of the infrared-sensitive block of the
10 optical image sensor is such that a clear image is obtained from a living organism, and an unclear image is obtained from a replica. If the finger is an actual living finger, the fingerprint images from both blocks are clear, but in the case of a replica, the image from
15 the block having infrared sensitivity is clear, and the image from the block without having infrared sensitivity is unclear. A reference processing section compares the clarity of the fingerprint images from the block with infrared sensitivity and the block without having
20 infrared sensitivity, and if there is a difference therebetween, judges that the finger was a replica. After this is done, an image processing section 14 extracts minutiae from the fingerprint image, and a comparison section compares the fingerprint data with fingerprint in
25 a database.